REMARKS

Applicant respectfully requests re-consideration of the application as amended in view of the arguments presented below.

Summary of Office Action

Claims 1-23 are pending.

Claims 1, 8, 15, and 17 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,448,837 of Naffziger ("Naffziger").

Claims 2-7, 9-14, 16, and 18-23 were indicated as being allowable if re-written.

Summary of Amendments

Claims 1-23 have been amended. Applicant submits that the amendments to the claims are supported by the specification including the drawings and claims as originally filed and that the amendments do not add new matter. For example, support for the amendment to claims 1, 15, and 17 can be found in Figures 1-4, 8-10 and pages 14-15 of the specification. Support for the amendment to claim 8 can be found at Figure 7 and page 13 of the specification.

Response to 35 U.S.C. § 102 rejections

Claims 1, 8, 15, and 17 were rejected as being anticipated by Naffziger. As stated above, claims 1, 8, 15, and 17 have been amended. Applicant respectfully submits that amended claims 1, 8, 15, and 17 are not anticipated by Naffziger.

With respect to claim 1, for example, applicant submits that *none of the cited references teaches or discloses enabling current shunting for a shunt-enabled subset of a plurality of lines terminated by termination circuitry.*

Naffziger includes a disclosure of current shunt circuitry for terminated I/O lines. Although Naffziger discloses enabling and disabling current shunting, such enabling or disabling is performed collectively on *all* I/O lines. (Naffziger col. 2, line 53- col. 3, line 11; Fig. 1 "TERM" control). Thus Naffziger does not teach or disclose enabling current shunting *for a subset* of the plurality of lines terminated by termination circuitry.

In contrast, claim 1 as amended includes the language:

> 1. A method comprising:
> *enabling current shunting for a shunt-enabled subset of a plurality of lines terminated by termination circuitry*, each shunt-enabled line having an associated current shunt; and
> drawing current from a termination voltage supply through a termination voltage delivery network to the termination circuitry for each line carrying a first signal; and
> drawing current from the termination voltage supply through the termination voltage delivery network to the associated current shunt for each shunt-enabled line carrying a second signal.

(Claim 1, as amended)(*emphasis added*)

Similarly amended claim 15 includes the language:

> 15. An apparatus comprising:
> means for terminating a plurality of lines, wherein current is drawn from a termination voltage supply through a voltage delivery network to the means for terminating for each line carrying a first signal; and
> *means for selectively shunting current* drawn from the termination voltage supply and through the termination voltage delivery network *for each line of a subset of the plurality of lines* when that line is carrying a second signal.

(Claim 15, as amended)(*emphasis added*)

Thus applicant submits amended claims 1 and 15 are not anticipated by Naffziger.

With respect to claim 8, applicant respectfully submits that Naffziger *does not teach or suggest partial current shunt circuitry wherein a maximum current drawn by the partial current shunt circuitry is less than a maximum current drawn by the termination circuitry.*

The data driven on the lines determines whether the current drawn from the termination voltage supply is provided to the termination circuitry or the current shunt circuitry. However, Naffziger clearly strives to maintain the current drawn *from the termination voltage supply* as substantially constant irrespective of whether the current is provided to the termination circuitry or the current shunt circuitry thus rendering the current drawn from the termination voltage supply less data dependent. (Naffziger, col. 3, lines 45-57). Thus the maximum current that can be drawn by Naffziger's current shunt circuitry is substantially the same as the maximum current that can be drawn by Naffziger's termination circuitry. *Accordingly, Naffziger does not teach or suggest partial current shunt circuitry wherein a maximum current drawn by the partial current shunt circuitry is less than a maximum current drawn by the termination circuitry.*

In contrast, amended claim 8 includes the language:

> 8. An apparatus comprising:
> termination circuitry to terminate one or more lines, the termination circuitry to draw current from a termination voltage supply and through a termination voltage delivery network; and
> *partial current shunt circuitry to draw current from the termination voltage supply and through the termination voltage delivery network, wherein a maximum current drawn by the partial current shunt circuitry is less than a maximum current drawn by the termination circuitry.*

(Claim 8, as amended)(*emphasis added*)

Thus applicant submits amended claim 8 is not anticipated by Naffziger.

Although the value of the data carried by a given line determines whether current is provided to the termination circuitry or the current shunt, the same amount of current is drawn from Naffziger's terminating supply voltage for a given line irrespective of the value of the data on that line. *Naffziger does not teach or suggest that the current drawn by the termination circuitry from the termination voltage supply in response to a selected line carrying a first signal is greater than any current shunted in response to the selected line carrying a second signal.*

In contrast, amended claim 17 includes the language:

> 17. A system comprising:
> a bus comprising at least one line;
> a termination voltage supply; and
> a plurality of devices coupled to the bus, wherein at least one device is a terminating device comprising a termination voltage delivery network and termination circuitry coupled to the termination voltage supply to terminate at least one line of the bus, *the terminating device having partial termination voltage current shunting, wherein a current drawn by the termination circuitry from the termination voltage supply through the termination voltage delivery network in response to a selected line carrying a first signal is greater than any current shunted away from the termination circuitry in response to the selected line carrying a second signal.*

(Claim 17, as amended)(*emphasis added*)

Thus applicant submits amended claim 17 is not anticipated by Naffziger.

Given that claims 2-7 depend from claim 1, claims 9-14 depend from claim 8, claim 16 depends from claim 15, and claims 18-23 depend from claim 17, applicant submits dependent claims 2-7, 9-14, 16, and 18-23 are likewise not anticipated under 35 U.S.C. § 102 by Naffziger.

Applicant respectfully submits that the rejections under 35 U.S.C. § 102 have been overcome.

Conclusion

In view of the amendments and arguments presented above, applicant respectfully submits the applicable rejections and objections have been overcome. Accordingly, claims 1-23 should be found to be in condition for allowance.

If there are any issues that can be resolved by telephone conference, the Examiner is respectfully requested to contact the undersigned at **(512) 858-9910.**

Respectfully submitted,

Date June 3, 2005

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